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Brazil: Diverse Experiences in Institutional Governance in the Public and Private Sectors

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Abstract

The main objective of the chapter is to investigate the Brazilian Higher Education system focusing in its institutions' internal environment; that is, how power is distributed inside institutions and the main traits of its inner decision-making process. Brazilian higher education is known by its diversity, in both its public sector and its much larger private sector. This chapter will highlight these differences, establishing connections between this diversity and the ways institutions build-up their internal decision-making process. We will do this study taking into consideration how this process is perceived by the central actors in all higher education institutions: the academic staff.

Brazil, like many other countries in Latin America, was taken by surprise by the new demands and changes posed by globalization. In the past, import-substitution industrialization produced a strong inner-oriented culture among Brazilian elites and society at large. In contrast, the last decade of the 20th century saw the stability of this major framework challenged in a dramatic manner. The opening of the economy, a successful monetary stabilization program, a strong privatization program and a new regulatory framework created a new macroeconomic environment.

This chapter aims to outline how Brazilian Higher education is faring under this new scenario. The main objective of the chapter is to investigate the institutions' internal environment, that is, how power is distributed inside institutions and the main traits of its inner decision-making processes. We will use this analysis to

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highlight the main challenges Brazilian higher education faces in dealing with a changing environment.

Brazilian higher education is known by its diversity, in both its public sector and its much larger private sector. This chapter will highlight these differences, establishing connections between this diversity and the ways institutions build-up their internal decision-making processes. We will do this study taking into consideration how this process is perceived by the central actors in all higher education institutions: the academic staff.

The empirical materials for this analysis are the data from three national surveys on the Brazilian Academic Profession, one of them conducted in 1989 (with support of Carnegie Foundation), another in 2003 (with support of Ford Foundation and the last one in 2007 (with support of FAPESP – State of São Paulo Science Foundation), and some in-depth interviews made in 2006, with support of the Fulbright Council under the Program New Century Scholars. All these surveys used representative samples of Brazilian academics teaching in institutions granting bachelor degrees. No restrictions were made regarding the kind of contract the academic holds with her/his institution. In Brazil, most academics in private institutions hold a part-time appointment, while their counterparts in the public sector usually hold a full-time appointment and tend to work in just one institution. Nevertheless, since the private sector accounts for 72 percent of all enrolments at the undergraduate level, it would not make sense to exclude academics with part-time contracts from our samples. Besides, for most of the academics working in the private sector, teaching in higher education represents his/her most relevant work commitment, even if they teach at more than one institution. The only major difference between the samples is the inclusion of a small stratum of academics working at federal research institutes in the 2007 sample. While the number of Federal research institutes in Brazil is small, they do play a relevant, even if minor, role both as sites for sound basic research and as settings for high quality graduate education.

The chapter is divided into five parts. The first part presents the historical evolution of Brazilian higher education. The main objective here is to trace how diversity took root in the Brazilian experience and to depict the main changes in the regulatory environment of Brazilian higher education. The second part proposes a classification for the diverse institutions present in the Brazilian higher education landscape, and provides clues about how this diversity is translated into the different ways academics organize and shape internal decision-making processes. The third part explores how power is distributed among actors within institutions. Finally, the last two sections explore how these differences matter for understanding the way these institutions are managed and the alternatives open to each kind of Brazilian institution.

Brazilian higher education: an overview of its historical background

The most relevant traits of Brazilian modern higher education date from the 1930s. The 1931 University legislation adopted the multi-college university as the desirable institutional model, where HE institutions were supposed to combine a Faculty of Philosophy, Science and Humanities with professional colleges, most often Law, Medicine and Engineering (For an overview of Brazilian educational policies in this period, see Schwartzman, 1995). The 1931 University Law and legislation reinforced the accepted belief that the main role of higher education was to provide training and certification for the established professions. At the core of this law was the principle that in granting degrees, higher education institutions acted on behalf of the state, extending legally binding professional credentials. Thus, one of the reform's main concerns was to assure that all students would be exposed to the same basic training and curricula.

At the federal level, this principle entailed building an elaborated system of bureaucratic controls and regulations supported by a strong bureaucracy linked to the newly created Ministry of Education. A National Council of Education, appointed by the Minister of Education, was in charge of the supervision and control of the country's educational policies and HE institutions. For each profession, a Federal Regulatory Council was created. The most relevant regulatory bodies created in 1931 are still in place and have been enlarged by many other federal initiatives. The combined activities of all these bodies created a labyrinth of laws, decrees and regulations.¹

The 1968 Reform

The second major reform of Brazilian higher education took place in 1968, when the federal government, at the time under military rule, enacted a bill seeking to reorganize the higher education system following the North American model. The Reform replaced the old chair system with the department model; proposed a division of the old Faculties of Philosophy and Science into specialized Institutes, giving autonomy to different fields in science; proposed full-time contracts for facul-

¹ For instance, from 1996 to 2007, the federal government has enacted 2,297 laws, regulations, and decrees. Most of the norms are intended to regulate small details of day-to-day life of HE institution.

<http://www.prolei.inep.gov.br/pesquisar.do?anoInicial=1996&anoFinal=2007&indIncial=120&indFinal=129&Mais=false&ManterDelimitador=29&descricao=&tipoDocumento=>

ty; regulated graduate programs and substituted the conventional sequential course by the credit system.² With this reform the ideal of a unitary higher education system, exclusively constituted by public, tuition-free, research oriented universities, took root in the minds of the political leadership. This idealistic goal has had a lasting impact on the beliefs that guide public decisions on higher education in Brazil.

From the beginning, the 1968 Reform faced great obstacles. First came the negative overall political climate marked by strong resistance directed against the military government.³ A second source of resistance came from inside the higher education system. This was led by the chair holders in the more traditional schools of Law and Medicine (Klein, 1992). Even so, the crucial aspects of the reform were successfully implemented in the public sector in the 1970s. Federal and state investments in public HE institutions grew and most of the funds were used for new buildings, extending full-time contracts to almost everyone, creating research facilities, and improving graduate programs. Estimates show that the Federal government's budget for universities between 1972 and 1986 grew by 540 percent (Schwartzman, J. 1993, Velloso, 1987, Castro and Schwartzman, 2005).

The 1968 Reform was enacted amid an explosive increase in the demand for higher education. In 1960, 95,000 students were enrolled in undergraduate courses. Ten years later, this number had risen to 425,000 and by 1975 to more than one million.. This massive growth was not taken into consideration by the Reform. In the public sector, entrance examinations and *numerus clausus* was, and still are, used to limit the demand. To face this scenario, Government relaxed the constraints on the private sector. The growth of the private sector from the 1970s was achieved mostly by an increase in the number of for-profit, teaching oriented, non-university schools and colleges. Thus, it comes as no surprise that private higher education in Brazil was (and still is) regarded with contempt by most public stakeholders. From the point of view of the Ministry's bureaucratic bodies, the private sector was a deformity that defaced the elegant uniformity proposed by the Reform. From this perspective, the private sector was tolerated but placed under strong controls.

Likewise, graduate education in Brazil since the end of the 1960s grew at an explosive rate. Enrollments in graduate programs rose from almost zero at the beginning of the 1960s to more than 40,000 at the end of 1980s. Today there are almost 80 thousand students enrolled at this level. The growth of graduate education was a result of the combined efforts from S&T public agencies and the Ministry of Education. The agencies regarded graduate education as a tool for strengthening the scientific elite which in turn was regarded as necessary for the country's eco-

² For an overview of the 1968 Reform, see Klein, 1992 and Durhan, 1998

³ One relevant source of resistance against the 1968 reform was the fact that the first reform proposals were drafted by a high level committee with participation of specialists from the U.S. supported by a Brazil-US cooperation treaty (MEC-USAID Cooperation Treaty).

nomic development. The Ministry of Education had as its goal the education and training of academic staff in public institutions. Since the early 1970s, and in contrast to developments at the undergraduate level, the Government and the academic community have made a decisive effort to assure quality at this level. At that time, the Fundação Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), the Ministry of Education agency in charge of the graduate education, created a sophisticated peer review evaluation process that has successfully connected performance with support.⁴

Changes in the 1990s and 2000s

The new economic and social environment created by the opening of the Brazilian economy in the early 1990s created new pressures on the higher education system. Changes in society's perceptions about higher education took two major directions: an increasing demand for quality control, especially at the undergraduate level; and, pressure to open the science system to a more demand-driven orientation.

From 1994 to 2003, the Brazilian government was led by President Fernando Henrique Cardoso. Cardoso's response to these new demands followed the general lines the literature usually acknowledges as standard reforms for higher education in the context of globalization (Enders, 2001, 2004; Scott, 2003; Goedegebuure et al., 1993). Once again, the government allowed the private sector to expand to match the growing pressure for access to higher education. At the same time, the government adopted new approaches designed to steer institutions from both the private and public sectors towards better performance in undergraduate education and to strengthen the interface between higher education and the productive sector.

In 1997, the Brazilian government enacted a new Education Act (*Lei de Diretrizes e Bases da Educação - LDB*). For the first time, the Act explicitly accepted the diversity inside Brazilian higher education and recognized the existence of institutions primarily devoted to undergraduate teaching. It also acknowledged a shorter "technological" degree, to be granted after completing a two year program focusing on mastering specific competencies.⁵ The new Education Act also granted expanded autonomy to universities, while at the same time increasing pressures to raise their academic profiles. According to LDB, in order to be accredited (and, for the first time, re-accredited every five years) as a University, the institution

⁴ For an overview of Brazilian graduate education see Balbachevsky, 2005.

⁵ Not surprisingly, this new modality of tertiary education is offered by private institutions and is flourishing in the area of business studies.

should provide graduate education with a minimal performance, as evaluated by CAPES, and a career path for its academic staff. Henceforth, the Ministry expected at least one third of a university's academic staff to have a Masters or higher degree. These reforms achieved some important results. Recruiting policies in all institutions were improved as the qualification threshold was raised. All in all, these new developments tended to create a more competitive environment for the higher education system (Sampaio, 2000).

The election of Luis Ignacio Lula da Silva as president, in 2003, weakened the process outlined above. His party, PT (Partido dos Trabalhadores, the Workers Party) has strong links with social movements and the unions, particularly those in the public service. Thus, Lula's higher education policy proposals have been strongly based on the demands made by public university teacher's and employee's unions. One of the most salient components of Lula's higher education policy is the outspoken aversion to initiatives that have any resemblance to privatization. From the point of view of unions in the public sector, privatization is related to three different issues which they strongly oppose: charging tuitions in public institutions, external assessment, and allowing the universities to raise and manage money independently. Since Lula's election, a myriad of decisions and regulations have forced public universities to be more dependent on public money and less accountable to external stakeholders.

The most relevant steps taken by the new government in higher education are related to the issues of social inclusion and minority access. Paradoxically, at the end of his first year, the government launched a program called "University for All", which exchanged fiscal benefits for tuition exemption for low income and minority students in the private sector. Ironically, for a government opposed to privatization, this program extended for the first time tax exemption to private institutions. Public universities were also encouraged to implement quota programs for students coming from public high schools, which generally have poor standards, and to minorities. More recently, the government launched a program that increases the amount of money available to federal universities as long as they are successful in implementing initiatives aimed at increasing undergraduate enrollment.

Regarding the private sector, Lula's policy has a permanent *leit-motif*: to push strict control and restrictions. One instrument, dating back several decades, has been to require high academic standards of teaching-oriented and tuition dependent institutions. These standards include full time staff with doctoral degrees and some evidences of research activity inside the institution. The assumption is that teaching quality could only be assured if linked to research and a full-time, highly qualified professoriate. But the effects tend to be the opposite. These policies have had an adverse impact on the process of differentiation in the private sector. In the new policy environment, the institution that fares best is the one that maximizes its gains in scale, enlarging the number of undergraduate tuitions in order to face the extra-costs created by the new exigencies imposed by the Government. Thus, it comes as no surprise that the private sector in recent years experienced a strong

movement toward concentration. As a result, many small local institutions have been taken over by larger for-profit corporations.

Institutional environment: the sources of diversity

As noted earlier, since the implementation of the 1968 Reform, the Brazilian higher education system has been under strong pressure to diversify. By the late 1970s, its profile already showed traits of a highly diverse and sharply stratified system: a public, tuition-free network of universities at the top, protected from massification by strong, selective entrance examinations at the undergraduate level, and a large number of private low quality, tuition-paying institutions at the bottom.

Nevertheless, even among the public universities, one can find sharp differences. One distinct strata is composed of those few universities that have succeeded in establishing a strong graduate level, which we will call **public research universities**. The most distinctive trait of the research universities in Brazil is the concentration on graduate education. None of these institutions has less than 30 percent of their enrollments at the graduate level. Their academic staff have a high academic profile. More than 70 percent of academics in these universities have full time contracts and more than 60 percent have a doctoral degree. In some of them, the proportion of doctoral degree holders reaches more than 90 percent. These universities are responsible for most of the high quality basic research conducted in Brazil. In 2006 only 26 universities had this profile. Even so, they perform a decisive role, both as high quality research sites and also as doctoral granting institutions. These research universities and a small number of federal **research institutes** owned by the Brazilian Ministry of Science and Technology account for more than 70 percent of all doctoral degrees granted by the country in 2007.

The other public universities⁶ are mostly oriented toward the undergraduate level. They offer good quality contracts, usually full-time with small teaching loads, but have more difficulty in attracting academics with a high academic profile. These universities have not only a smaller proportion of Ph.D. holders on staff (50 percent or less), but also inside each institution these academics tend to be concentrated in a small number of academic units. The Brazilian literature used to label these units as “Isles of competence” - ilhas de competência (Oliveira, 1984). In these small dynamic sites, graduate education develops and research takes roots. These research oriented sites are specially motivated by the regional relevance of their research agenda (Coutinho et al., 2003). We label these institutions **public regional universities**.

⁶ The great majority of Brazilian public institutions are universities. There are a small number of technical colleges, but they were not included since they don't grant bachelor degrees.

The private sector, on the other hand, has experienced extreme stratification in the two last decades, with the growth of a segment of prestigious, **elite private institutions** catering to the needs of students from the richest and better educated families. Some of these institutions are catholic and other denominational Universities, but there are also a number of lay elite institutions, particularly in the fields of economics and management. Beside them, there are a large number of institutions operating in a mass market, where the price charged for education is the most relevant differential. We label these institutions **private mass oriented institutions**. This sub-sector also experienced a strong consolidation movement in the last 10 years. As a result, while most private institutions are still small colleges scattered all around the country, there are a growing number of large private for-profit universities. Even so, being confined to a kind of “commodity-like” market, these universities have an academic environment almost as poor as the one found at the small private colleges, with few incentives for academic staff development.

As one would expect, academic life and routines are very distinct if one considers the different types of institutions described above. While teaching at the undergraduate level is a shared responsibility, teaching at the graduate level is a more selective activity (See Table 1). At research universities, undergraduate lectures combine with teaching responsibilities at master and doctoral programs. At public regional universities, 62.5 percent of the academics have their teaching responsibilities confined at the undergraduate level. Among those that teach at the graduate level, teaching at master's degree programs is the most common experience, although 16 percent of these academics have also some experience teaching in doctoral programs. The profile of the academics employed at private elite institutions resembles the one just described for the public regional universities. A majority of the academics at the private elite institutions teach only at the undergraduate level (64 percent), while another 14 percent teach also at master program's and another 16 percent have teaching responsibilities at undergraduate, master's and doctoral levels. Academics from the private mass oriented institutions have their teaching responsibilities restricted to the undergraduate level. On the other hand, teaching exclusively at the graduate level is a rare experience, except for those employed as researchers at public research institutes.

Table 1: Teaching responsibilities at all levels by type of institution (2007)

Teaching responsibilities	type of institution					Total %
	Public research	Public research uni-	Public regional uni-	Private elite insti-	Private mass in-	

	insti-tutes%	versities %	versities %	tutions%	stitu-tions%	
Only graduate education	53.8	1.6	.7	5.5	.2	3.2
Doctoral, master's and undergraduate	20.5	42.5	15.9	16.5	1.9	14.9
Master's and undergraduate	10.3	9.8	20.9	14.0	4.9	11.1
Undergraduate only	15.4	46.1	62.5	64.0	92.9	70.8
Total (100%)	39	193	277	164	468	1,141

(Source: FAPESP/CAP project. Brazil 2007)

While teaching at the undergraduate level tends to be a common experience, research, as a fully developed role, is less usual. In fact, although many academics in Brazil regard research as a desirable activity (See Table 2), and many reported having done some research in the last two years, very few could be considered fully professionalized in their role as researcher.

Table 2, Personal preference between research and teaching by type of institution (2007)

Regarding your own preferences, do your interests lie primarily in teaching or in research?	Type of institution					Total %
	Public re-search institu-tes %	Public re-search uni-versities %	Public re-gional uni-versities %	Private elite institu-tions %	Private mass institu-tions %	
Primarily in teaching	.0	2.6	6.1	9.9	12.3	8.4
In both, but leaning towards teaching	10.2	35.1	42.2	40.4	49.5	42.4
In both, but leaning towards research	46.9	55.2	45.2	43.9	34.7	42.4
Primarily in research	42.9	7.2	6.5	5.8	3.5	6.8
Total (100%)	49	194	294	171	487	1,195

(Source: FAPESP/CAP project. Brazil 2007)

To fulfill their role as researcher, academics should be able to bring research findings to the attention of a wider audience, which, means usually to publish these findings in a prestigious journal (Fulton and Trow, 1975). In Brazil, researchers should also have the skills and experience to compete for external support for their research activities, since it is not usual for public HE institutions to set aside their own resources for research. The 1997 Education Act requires some indication of research activity before a private institution can achieve university status. Since then, many private institutions have set aside funds to support academics' research. However, these resources, usually stay under the discretionary control of the institution's authorities, and are not accessible according to the usual academic practices of peer review.

Table 3 ranks the research activity among the Brazilian academics from a non-active through a fully professionalized researcher (one that performs research, publishes and is able to secure external support) and has international connections. Within these extremes, we can identify academics performing research without external support and who do not publish their results; academics doing research and publishing but who cannot secure external support; and academics doing research, publishing and who have access to external funds but are unable to actively connect with the international community of peers.

Table 3: Degree of commitment with the research activity by type of institution (2007)

Degree of commitment with research	type of institution					Total %
	Public research institutes %	Public research universities %	Public regional universities %	Private elite institutions%	Private mass institutions%	
Full researcher with international connections	55.1	29.9	11.8	15.8	2.3	13.3
Full researcher with only domestic connections	14.3	24.4	15.5	9.4	4.9	11.8
Doing research without support	22.4	31.0	44.6	33.3	37.4	36.9
Doing research without publishing	4.1	8.6	11.1	13.5	16.4	12.9
Not active as a	4.1	6.1	16.9	28.1	39.0	25.2

researcher						
Total (100%)	49	197	296	171	487	1,200

(Source: FAPESP/CAP project. Brazil 2007)

The role of researcher is only fully performed by the majority of academics in research institutes and research universities (See Table 3). In research institutes, most academics have international connections, but, in research universities, only 29.9 percent do so. In regional universities, only 27.3 percent of the academics can be classified as full researchers, most of them, however, without international ties, while 11.1 percent do research without publishing, and 16.9 percent report no research activity.

The profile for the private elite institutions in this dimension is very similar to the one for the public regional universities, and the proportion of academics not active as researchers is larger at 28.1 percent. At the private mass oriented institutions, the number of fully professionalized researchers is almost non-existent, while the number of fully inactive researchers rises to 39 percent, while another 53.8 percent of these academics either do research without publishing or, if publishing, cannot secure external support for their projects.

The different levels of involvement in research and graduate education among academics at each type of institution are mirrored by the different patterns of distribution of working time (See Table 4). As expected, the most relevant differences are on the commitment of time to research related activities.⁷ The more the institution is oriented toward research, the more time is spent on research. The type of institution explains 18 percent of the variance found for this dimension. The differences on the distribution of time on teaching-related activities⁸ are not so large, but follow a similar pattern. The more the institution is oriented toward undergraduate education, the larger is the span of time academics commit to teaching related activities. Service, administrative duties and other academic activities play minor roles for most academics and absorb only a small amount of time in all institutions.

Relevant differences are present in terms of the total time spent on all academic related activities. In research institutes academics spend an average of 42.0 hours per week on academic tasks, compared with 40.5 hours for academics in public universities (both research and regional universities). In the private sector, the length of time committed to academic activities is shorter (38.8 hours. for elite and 34.9 hours for mass oriented institutions).

⁷ This item includes reading literature, writing, conducting experiments, field-work.

⁸ This item includes preparation of instructional materials and lesson plans, classroom instruction, advising students, reading and evaluating student work.

Table 4. Distribution of time (Hours per week) on different academic activities by type of institution

		hours per week spent on teaching	hours per week spent on research	hours per week spent on services	hours per week spent on administration	hours per week spent on other academic activities	hours per week spent on all academic activities
Public research institutes	Mean	9.7660	22.5745	.7234	6.1064	2.9149	42.0851
	N	47	47	47	47	47	47
	Std. Deviation	7.78296	11.1037	1.93033	6.86274	3.71735	12.84325
	Skewness	.738	-.219	3.233	2.197	1.125	-.750
Public research universities	Mean	16.7737	12.6895	2.5842	5.4632	3.1053	40.5632
	N	190	190	190	190	190	190
	Std. Deviation	8.31944	8.87261	5.02804	5.91440	4.08889	12.01118
	Skewness	1.244	1.479	2.842	2.291	1.564	-.075
Public regional universities	Mean	18.9862	11.6414	1.9172	5.4276	2.5379	40.5138
	N	290	290	290	290	290	290
	Std. Deviation	11.3689	9.14941	4.88200	7.52964	4.84503	14.17103
	Skewness	.950	1.105	3.892	2.310	3.232	-.018
Private elite institutions	Mean	18.3675	10.0964	2.9157	5.0482	2.3434	38.7711
	N	166	166	166	166	166	166
	Std. Deviation	11.6464	9.84561	7.98818	8.35559	4.93806	16.49781
	Skewness	.911	1.582	3.808	2.397	3.814	-.361
Private mass institutions	Mean	20.8476	5.6242	2.4384	3.7453	2.2276	34.8831
	N	479	479	479	479	479	479
	Std. Deviation	12.2800	6.65472	6.35589	7.22225	5.24588	17.11415
	Skewness	.848	1.575	3.620	2.679	3.774	.275
Total	Mean	18.9309	9.5717	2.3319	4.7193	2.4906	38.0367
	N	1172	1172	1172	1172	1172	1172
	Std. Deviation	11.4801	9.26187	5.98332	7.30152	4.87897	15.63950
	Skewness	.971	1.354	3.898	2.435	3.371	-.048

ANOVA	F	13.128	66.059	1.719	3.852	1.236	9.048
	Sig.	.000	.000	.143	.004	.294	.000
	Eta squared	.043	.185	.006	.013	.004	.030

(Source: FAPESP/CAP project. Brazil 2007)

Patterns of organization and management of the academic institutions in Brazil

The developments described above have had a lasting impact on the way higher education institutions are organized and managed in Brazil. First, the departmental model, introduced in Brazil by the 1968 reform is well developed and recognized by the academic staff in the public sector. This tends to be the reference for the academics employed by the elite private institutions as well. Nevertheless, in the mass oriented private sector, the department as the smallest relevant academic unit is not recognized. For most academics employed at these institutions, the relevant academic unit is the undergraduate program where he/she teaches. Another alternative locus of decision-making inside these institutions is the field where she/he teaches.

As explained by an academic from this sub-sector interviewed in 2006:

“If you teach a specialized subject – one that is specific to one undergraduate program like *Marketing*, for instance - you are attached to an undergraduate program and your work is supervised by the Program’s head – the Program coordinator. Now, if you teach a subject that is more generic, and have responsibilities at different undergraduate programs – like Mathematics or Sociology – then you are attached to a subject area and your work is supervised by the head of subject area, the area’s coordinator.” (Balbachevsky, 2007)

This is what we also found in 2003, when we asked which was the smallest academic unit inside the institution (See Table 5).

Table 5. Smallest academic unit inside the institution by institutional setting (2003)

		type of institution				Total %
		Public re-search Uni-versities %	Public re-gional Uni-versities %	Private Elite institutions %	private Mass insti-tutions%	
Smallest	Department	76.1	68.8	75.6	23.4	50.8

academic unit	Undergrad- uate pro- gram	4.3	18.8	11.0	34.6	22.3
	Teaching subject	19.7	12.3	13.4	42.0	26.9
Total (100%)		188	276	82	431	977

(Source: Ford Foundation/NUPES 2003 – The Brazilian academic profession)

While most academics in the public sector and elite private institutions tend to recognize the Department authority, at the mass private institutions two units are discernible: the undergraduate teaching program and the teaching area. This difference is not trivial as it is strongly related to the perception of how power is distributed inside the institution. In the 2007 survey we presented a list of eleven different decision areas. The respondents were asked to identify who is the actor with most influence over each decision. Table 6 shows the average number of times institutional authorities (either at institutional level or at the academic unity level) were nominated the key actor and the average number of times faculty (either as individuals or as members of committees) were identified as the actor with primary influence. As one can see, there is a strong association between the academic's institutional setting and the answer to these questions.

Table 6. Decision space of institutional authorities and faculty in different institutional settings

Type of institution	institutional authorities' decision space	Faculty's decision space
Public research Universities	Mean	5.2792
	N	197
	Std. Deviation	3.00649
Other public institutions	Mean	6.0439
	N	296
	Std. Deviation	3.16572
Elite Private institutions	Mean	7.6550
	N	171
	Std. Deviation	3.00259
Mass private institutions	Mean	9.0164
	N	487

	Std. Deviation	2.38128	1.84642
Research institutes	Mean	3.9388	4.4898
	N	49	49
	Std. Deviation	2.86071	2.72429
Total	Mean	7.2683	2.6592
	N	1200	1200
	Std. Deviation	3.25323	2.83749
ANOVA	F	104.1467	69.4577
	Sig.	0.000	0.000
	Eta squared	0,26	0,19

(Source: FAPESP/CAP project, Brazil 2007)

Institutional authorities are always perceived as strong players. On average, these authorities are perceived to be the principal actor in 7 out of 11 decision areas. Nevertheless, there are great variations relating to different institutional settings. In research institutes these authorities are primary in only 4 decision areas. At Research Universities and regional universities institutional authorities are perceived to be primary in 5 and 6 decision areas respectively. The distribution of power inside the private sector definitely favors institutional authorities. This actor is perceived as having the primary influence in 8 out of the 11 decision areas inside the elite private institutions and in 9 decision areas among academics employed at the mass private institutions.

On the other hand, when one looks at the decision space of academics, the pattern is opposite: academics have more room for autonomous decision inside the research institutes where they are perceived as the decisive instance in 5 out of 11 decision areas and at Research Universities where they are perceived as the primary actor in 4 decision areas. In the regional universities and the elite private institutions, academics have less autonomy, being the central actor in only 3 out of 11 decision areas. But it is inside the mass private institutions where faculty are perceived to have the least influence. Faculty was perceived to be the key actor only in 1 out of 11 decision areas.

The pattern described above is not new in Brazilian Higher Education. The first survey on the Brazilian academic profession in 1992, already detected a much stronger degree of centralization inside the private sector, especially at the mass oriented institutions. In 1992, when using a scale to measure the degree of centralization⁹ (See Table 7), academics from the mass private sector tended to report a

⁹ In the 1992 survey academics were asked to measure the degree of centralization in seven decision areas, using a scale ranging from 1 to 5, where 1 means “decision entirely centralized” (decisions under sole control of institution’s authorities), and 5 “decision entirely decentralized” (decisions under sole control of academics).

strong degree of centralization in all decision-areas explored by that survey. In second place were the academics from elite private institutions. Academics from the public sector tended to depict a much more decentralized decision-making process. Nevertheless, academics from public research universities tended to see the decision-making process inside their institution as more centralized than the academics from the regional universities.

Table 7: Degree of centralization of the decision-making process inside institutions – 1992

Type of institution		Selecting University's authorities	Choosing new faculty	Faculty promotion and tenure
Public research universities	Mean	2,75	3,39	2,85
	N	242	236	237
	Std. Deviation	1,348	1,400	1,418
Public regional Universities	Mean	3,69	3,93	3,11
	N	398	393	389
	Std. Deviation	1,359	1,355	1,435
Private elite institutions	Mean	3,10	3,70	3,11
	N	87	87	85
	Std. Deviation	1,356	1,365	1,235
Private mass institutions	Mean	2,02	2,60	1,86
	N	200	206	182
	Std. Deviation	1,400	1,393	1,111
Total	Mean	3,03	3,47	2,78
	N	927	922	893
	Std. Deviation	1,512	1,468	1,432

Type of institution	Budget priorities	Determining teaching load	Admission standards for undergraduate students	Approving new academic programs
Public research universities	Mean	1.60	3.53	2.22
	N	233	247	195
	Std. Deviation	.978	1.411	1.416
Public regional Universities	Mean	1.63	3.88	2.17
	N	383	402	359

	Std. Devia-tion	1.047	1.292	1.417	1.247
Private elite institutions	Mean	1.73	3.64	2.15	2.32
	N	82	86	78	72
	Std. Devia-tion	.994	1.283	1.196	1.243
Private mass institutions	Mean	1.26	3.04	1.83	1.58
	N	198	205	184	176
	Std. Devia-tion	.692	1.508	1.225	1.017
Total	Mean	1.55	3.58	2.10	1.95
	N	896	940	816	789
	Std. Devia-tion	.967	1.407	1.361	1.223

Scale: 1 “decision entirely centralized (decisions under sole control of institution’s authorities) to 5 “decision entirely decentralized (decisions under sole control of academics)

(Source: Carnegie Foundation/NUPES 1992 - The Brazilian Academic Profession)

To deepen our analysis of governance we focused on the areas where different institutional actors were perceived to be the main decision-makers. In order to highlight the pattern of responses given by our interviewees, depending on the type of institution where he/she works, we analyzed the pattern of associations for each question using the adjusted residuals calculated for each cross-table. This statistics provides a cell by cell comparison between the expected and observed frequencies. As such, this procedure allows us to analyze the pattern of association between different alternative answers considering each decision area explored by the questionnaire¹⁰ (See Table 8).

¹⁰ The adjusted residual for each cell is defined as:

$$(e-o)$$

$$\sqrt{(e.(1\text{-row proportion})(1\text{-column proportion}))}$$

Where e is the expected frequency when the variables are independent and o is the observed frequency. The values of the adjusted residuals vary from $-\infty$ to $+\infty$, but in the interval of ± 1.96 the adjusted residual’s significance is at least 0.05, which means that the probability of error in assuming an association between the values of the two variables is at least 5 percent.

Table 8: Positive significant adjusted residuals observed between decision areas and type of institutions

	faculty		Teaching		Research	
	Choosing new faculty	promotion and or tenure	Teaching load	Evaluation	Priorities	Evaluation
Research institutes	Government	Faculty committees	Faculty committees Individual faculty	Faculty committees	Faculty as individuals	-
Public research universities	Faculty committees	Faculty committees	Faculty committees Individual faculty	Faculty committees	Faculty as individuals	Faculty committees Faculty as individuals
Public regional universities	Government Faculty committees	Government Faculty committees	Government	Faculty committees	Faculty committees	-
Private elite institutions	Academic Unit managers	-	-	Institutional managers	Academic Unit managers	Academic unit managers
Private mass institutions	Academic Unit managers	Institutional managers Academic Unit managers	Academic Unit managers	Institutional managers	Institutional managers	Institutional managers Academic Unit managers

	Strategic institutional decisions				
	Selecting key administrators	Budget priorities	Undergraduate admission standards	New academic programs	International linkages
Research institutes	Government	Institutional managers	Faculty committees	Faculty committees	Individual faculty
Public research universities	Government Faculty committees Individual faculty	Government Faculty committees	Government Individual faculty	Individual faculty	Faculty committees Individual faculty
Public regional universities	Academic Unit managers Individual faculty	Government Faculty committees	Government Faculty committees	Faculty committees	-

	students				
Private elite institutions	Institutional managers	-	Academic Unit managers	-	Academic Unit managers
Private mass institutions	Academic Unit managers	Institutional managers	Institutional managers Academic Unit managers	Institutional managers	Institutional managers

(Source: FAPESP/CAP project, Brazil, 2007)

We can observe striking differences in the overall environment between the types of institutional setting. Considering first the decisions closer to daily academic life – staff, teaching, and research – public research universities have the most inner oriented profile, showing strong associations between decisions in these areas and the collegial and discretionary authority of faculty. Research institutes display a very similar pattern, with the only exception regarding decisions about the appointment of new faculty. Here there is a significant association between this setting and choosing government as the key actor for the final decision. Inside the other public institutions, the pattern described above is mitigated by the presence of governmental authority in three decision areas: academic staff appointments; faculty promotion and tenure; and teaching load. While in this institutional setting academics tend to be aware of the governmental interest in the decisions regarding the teaching related activities, decisions regarding research are not perceived as being under the same constraints. Here, decisions are significantly associated with faculty's interest.

The decision-making pattern in the private sector reveals a strong contrast. Institutional authorities at both the smaller academic units and at the institutional level, play a more relevant role in shaping the final decision in all aspects of the organization of the academic routine. The most important distinction between elite and mass oriented institutions is the more autonomous role played by the intermediary bodies of management in the former setting. In fact, among academics from elite private institutions, academic unity managers are significantly associated with decisions regarding selection of new faculty, teaching and research evaluation and setting the institution's research priorities. In the case of academics from the mass oriented private institutions, all these decision areas, except hiring new faculty are associated with the central authorities.

When we turn to the more strategic decision-making areas such as selecting key administrators, determining budget priorities, setting admission standards for undergraduate students, approving new academic programs, or establishing international linkages; one finds more awareness of the presence of external stakeholders at public institutions. For public research universities, external stakeholders, mostly the government are associated with decisions regarding selecting key administrators, budget priorities and setting admission standards for undergraduate students. Nevertheless, collegial authority and academics as individuals are also

regarded as relevant in these areas. Among academics from the other public institutions there is only one critical difference: the way the process of choosing academic authorities is perceived. Inside these institutions, this process is not significantly associated with external stakeholders. Instead, it is perceived as an inside decision, with individual students and academics playing a major role.

Decisions related to the process of setting new academic programs and establishing international linkages, on the other hand, are regarded as purely internal to the academic community in all public institutions. At research institutes, government is the sole actor associated with decisions related with appointment of key institution wide authorities. For all other decision areas, academic committees and faculty as individuals are the actors with primary influence.

We can also observe relevant differences in the pattern of associations in these institution-wide decision areas for the private sector. In this sector, the initiatives are significantly associated with the institution's managers. Once again, intermediate managers, linked to the academic unit, have more autonomy for decision-making inside elite private institutions, while at the mass oriented private institutions, strategic decisions are associated with the central authorities.

The data presented here provide relevant clues regarding the way different institutional settings are organized and the distribution of power. Inside research oriented public institutions, in both research universities and research institutes, academic committees are perceived as relevant actors in many decision areas and thus collegiality tends to be the most relevant form of power. What is more important, these instances are central for decisions regarding the academic's quotidian. At the regional public institutions, the interests of external stakeholders are more visible but collegial power and faculty as individuals are perceived as primary influences in decisions regarding the academic's daily life and in an institution's wider strategic decision areas. One area in particular presents a very peculiar pattern of decision-making. Academics working in these institutions perceived the process of choosing institutional authorities as a product of internal deliberation with participation of students and individual faculty. This pattern of responses may reflect the importance, in these settings, of the belief that choosing university authorities should be a decision to be taken internally, without intrusion by any external actor. This decision should be the result of one-man-one-vote internal elections with participation of academics of all ranks, students and non-academic staff. While most public research universities also adopt electoral procedures for Rectors, the pattern of responses shows that in more research oriented environments the academics, organized in collegiate bodies, are perceived as having the main influence over this process.

In the private sector, one finds a more hierarchical pattern, with less autonomy for academic initiatives and an enlarged space for management and central authority decisions. Intermediate managers are more active in elite oriented institutions while central authorities seem to concentrate more power in mass oriented institutions. This pattern is congruent with the hypothesis that elite oriented private institutions tend to decentralize up to a certain point the decision-making process in

order to offer more differentiated undergraduate programs and explore opportunities created by academic's entrepreneurship. Mass oriented institutions, on the other hand, tend to adopt a strongly centralized decision-making process, which is compatible with their approach to the higher education market. They offer more undifferentiated undergraduate programs to a less demanding public. In this market, the institutional comparative advantage comes more from strong controls over expenses than providing a richer and competitive academic environment (Balbachevsky & Albuquerque, 2007).

Finally, comparing the public and private sectors regarding decisions concerning an institution's research orientation, one finds a very clear pattern: the more oriented the institution is towards graduate education and research, the more decisions related to this area tend to be left in the hands of the faculty. Decisions in this area are perceived as strategic for private institutions, especially inside mass oriented institutions. But here is where research is less institutionalized and tends to show poor standards of quality regarding the number of papers actually published and the level of financial support (Balbachevsky, 2005).

Strategic decisions inside institutions

These differences in institutional design make some settings more active regarding strategic planning, i.e. the use of clear, performance based criteria for institution wide resource allocation and personnel decisions. Table 9 provides relevant clues to the way academics perceive the institution's orientations regarding this dimension. The question used in the 2007 survey explored to what extend – from the point of view of the academics – his/her institution uses different strategic goals as criteria for personnel decisions and for allocation of resources. Table 9 computes the proportion of positive answers ("much" or "very much") considering each dimension explored in the questionnaire.

Table 9 - Relevance of strategic goals for personnel decisions or for allocation of resources inside the institution – frequencies of positive answers by type of institution.

	Performance based	Evaluation based	Number of students	Number of graduates	quality of Research
Research institutes (%)	37.2	34.1	2.5	5.3	58.1
Research universities(%)	27.7	26.5	29.3	14.0	26.8
Regional Universities (%)	26.8	22.9	23.7	11.6	24.9
Private elite	43.8	40.9	36.9	10.7	41.1

Institutions(%)					
private mass institutions (%)	26.9	29.9	46.9	19.6	25.1

	Teaching quality	Research's practical relevance	Outside experience	Faculty Entrepreneurship
Research institutes (%)	31.8	40.9	16.3	21.4
Research universities(%)	23.3	16.1	10.9	11.8
Regional Universities (%)	24.4	17.9	19.5	15.4
Private elite Institutions(%)	52.3	36.5	35.1	34.2
private mass institutions (%)	47.1	37.2	41.9	21.9

Chi-square tests for all tables significant for $\alpha < .000$.

Source: FAPESP/CAP project, Brazil, 2007

This Table shows that strategic planning is not a recognizable issue inside the public sector. Among academics from this sector, less than 30 percent agreed with the idea that decisions at their institution are constrained by any of the parameters explored in the interview. For all public settings, personnel decisions are perceived as negatively associated with teaching quality, practical relevance of work, external experience, and faculty entrepreneurship. What is more surprising, quality of research is not perceived as a relevant criteria for personnel decisions even at the more research oriented public universities. Only inside research institutes is this issue perceived as a relevant criterion for personnel decisions.

Strategic planning is much more visible in private institutions. What is more, institutional goals tend to be reflected in the criteria selected by each kind of institution. Thus, inside elite institutions, funding allocation for different academic units is associated with evaluation and performance, while personnel decisions are influenced by academics' research quality and relevance, teaching quality, and entrepreneurship. Inside mass oriented institutions, academic units are funded based on the number of students enrolled and the number of students that graduate. While personnel decisions consider academic's teaching quality, research practical relevance, and experience outside of academia.

Concluding remarks:

The portrait depicted above provides some insight into the bases for diversity inside Brazilian higher education. Different institutional settings show very distinctive patterns of institutional design. In the public sector one finds arrangements more similar with the classical form described by Clark (1983). Institutions have a polycentric structure, with “many cells of specialization side by side and loosely connected at the operational level with only a small number of higher levels of coordination” (Clark, 1983, pp. 17). They are heavy at the bottom and the opportunities for coordination are few, which leaves little room for the imposition of decisions over the governance of basic academic units.

Nevertheless, the institutional environment is different in research intensive and graduate oriented public universities versus the undergraduate oriented institutions. In the former settings, collegiate arrangements tend to be perceived as more active in the internal decision-making process, and the arrangements exert influence in many decision areas. At the later settings, collegiate arrangements are less prevalent. In many decision areas they are surpassed by more personal ways by which faculty as individuals express their interests, alongside other internal constituencies.

The private sector, on the other hand, shows a more business-like institutional design, with a relatively clear chain of command radiating downward from the central authorities to the academic body. As said before, at elite oriented private institutions the intermediate management bodies tend to be more active and have more autonomy. At the mass oriented institutions, decisions tend to rest on the hands of the institution’s central authorities.

This diversity of institutional settings creates different challenges when one considers the institutional capabilities to adapt to a more unstable environment created by the changes put in place by globalization. As analyzed in another paper Balbachevsky (2000) concludes that until recently Brazilian higher education has been an environment mostly closed to external pressures. Competition from abroad is weak and the same can be said regarding the internationalization of the Brazilian academic market. Internally, higher education is strongly segmented, and until recently private education represented no real threat to the public sector. Public institutions are preserved from direct competition both by privileged access to the government’s programs and initiatives and by a benevolent approach from the official bodies in charge of evaluation. In this protected environment, old fashioned patterns of institutional design have room to survive. This is clearly the case in Brazilian public institutions. But, as environments change, new challenges confront the system. How these institutions will respond to a more unstable and less protected environment is an open question.

For the private sector, the challenges are on the opposite side: how to open the internal decision-making process in order to make it more bottom-up oriented, so that the institution can fully utilize the talents and competences embodied by aca-

demics? This challenge is crucial if the institution wants to be prepared to face the new environment and explore the opportunities it offers. In the new scenario created by globalization, academic entrepreneurship is a decisive tool. A centralized approach prevents the institution from being aware of the entire range of alternatives for initiatives created by the changes in the environment. But in order to incorporate academic entrepreneurship, there is also the need for a more flexible decision-making process, with stronger two-way channels of communication. Currently, this is the weakest point of management in the Brazilian private higher education sector.

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